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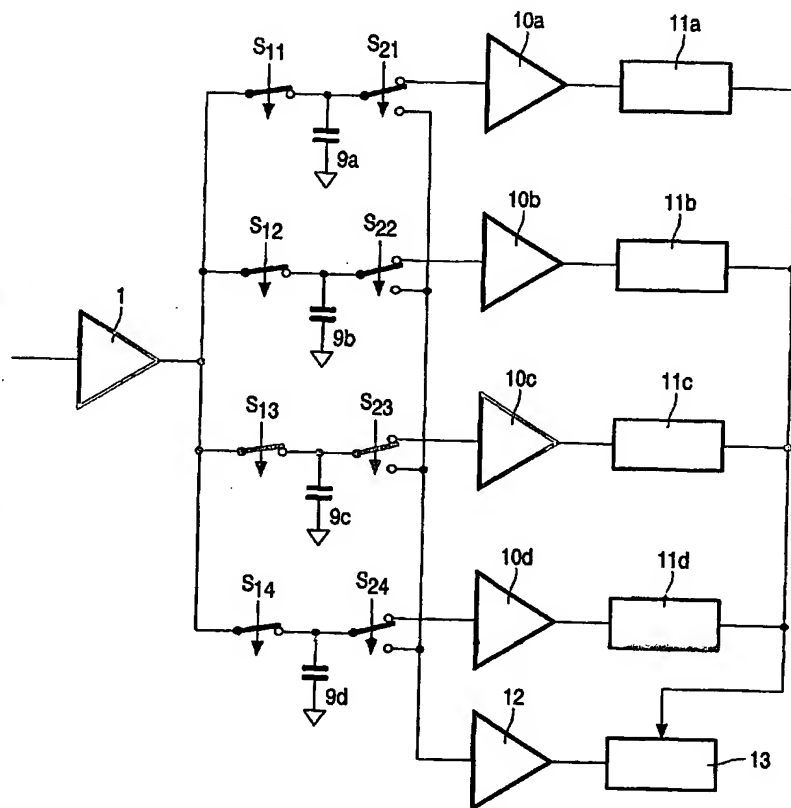
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(54) Title: **AN ANALOG-TO-DIGITAL CONVERSION ARRANGEMENT, A METHOD FOR ANALOG-TO-DIGITAL CONVERSION AND A SIGNAL PROCESSING SYSTEM, IN WHICH THE CONVERSION ARRANGEMENT IS APPLIED**



(57) Abstract: An analog-to-digital conversion arrangement for converting an analog input signal into a digital output signal with a most significant part and a least significant part comprises sample means for sampling the analog input signal, a plurality of coarse resolution analog-to-digital converters for converting the sampled analog input signal into a coarse digital signal representing the most significant part of the digital output signal, whereby the coarse resolution analog-to-digital converters are operated in an interleaved way. The analog-to-digital conversion arrangement further comprises a fine resolution analog-to-digital converter for converting the sampled analog input signal into a fine digital signal representing the least significant part of the digital output signal, based upon the coarse digital signal generated by any of said coarse resolution analog-to-digital converters.

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